BEFORE THE STATE OF WASHINGTON
ENERGY FACILITY SITE EVALUATION COUNCIL

IN RE APPLICATION NO. 99-1	)	
	)	EXHIBIT _____ (NEH-T)
SUMAS ENERGY 2 GENERATION	)	
FACILITY	)	

PREFILED DIRECT TESTIMONY OF

NW ENERGY COALITION AND WASHINGTON ENVIRONMENTAL COUNCIL

WITNESS: NANCY ELLEN HIRSH

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Nancy Ellen Hirsh. My business address is 219 1st Avenue South, Suite 100, Seattle, Washington, 98104.

Q. By whom are you employed and in what position?

A. I am employed by the NW Energy Coalition (NWEC) as Policy Director.

Q. Please summarize your education and business experience.

A. I have a Bachelor of Science degree from the School of Natural Resources at the University of Michigan. I spent twelve years in Washington, D.C. working for the National Wildlife Federation and Environmental Action Foundation on federal energy policy and electric utility issues. My primary responsibilities included advocating for increased federal investments in energy conservation, renewable energy and greenhouse gas emissions reduction programs; addressing the environmental and consumer impacts of utility, energy and transportation initiatives; and providing policy assistance to environmental and low-income advocates in support of their efforts to promote integrated resource planning and utility regulatory reform. I made numerous presentations to national and state audiences on the effect of federal and state laws on global warming and the need for more specific greenhouse gas emissions reduction programs. Since 1996, I have been the Policy Director for NWEC. I have served as an expert witness in regulatory proceedings in Georgia, Maryland, the District of Columbia, Oregon and Washington. My testimony in those proceedings focused on long-range utility planning, utility investments in energy conservation and renewable energy and the importance of low carbon power resources.

Q. What are your current responsibilities for the NW Energy Coalition?

A. I am the lead staff person responsible for establishing the policy goals of NWEC to enhance investments in energy conservation, renewable resources, and low-income energy services and to ensure affordable electricity for all northwest citizens while maintaining a healthy environment. I coordinate the work of the policy team as we conduct our policy analysis and develop our advocacy positions. I serve as Chair of the Board of the Renewable Northwest Project, Chair of the Sierra Club National Energy Committee and am on the Board of the Northwest Energy Efficiency Alliance.

Q. Please state the issues you will address in your direct testimony.

A. I will comment on the following issues: implications of siting another natural gas plant in Washington, greenhouse gas emissions (GHG), use of backup fuel oil and transmission constraints.

II. IMPLICATIONS OF SITING ANOTHER NATURAL GAS PLANT IN WASHINGTON

A. Are there natural gas power plants currently sited in the state that have not yet been constructed?

B. Yes. The Energy Facility Site Evaluation Council (EFSEC) has sited four natural gas power plants in the past several years that have not yet been built. Together, the capacity of those four plants is greater than 2000 MW. The permits for those plants have not expired and the developers could decide to build at any time.

Q. Have additional power plants been proposed in the State but not yet sited?

A. Yes. EFSEC has been requested to initiate a Potential Site Study for an 1100 MW gas fired power plant in Starbuck. Several 248 MW facilities have been proposed, including

one in Everett and one in Goldendale. On the horizon are additional gas power plants of various capacities.

A. **Should EFSEC take these other facilities into account when determining whether or not to site the proposed facility?**

B. Yes. EFSEC should assess the broader environmental and consumer implications of siting another power plant given the number and capacity of plants currently sited but not yet constructed. EFSEC also should consider the ramifications of multiple additional facilities being sited in the state, both through the state siting process and local siting processes. Questions for EFSEC to consider include:

- What would be the cumulative impact on the environment if all of the sited and proposed plants started operations? I would hypothesize that air, water and climate impacts would be significant should over 3000 aMW come on line in the state. We are aware of speculation as to whether some of the projects with active permits are likely to be constructed by the original developers. However, new owners could purchase the permit and move forward, pursuant to WAC 463.36.100. Or the economics of the marketplace (e.g., the energy supply deficit becomes acute) may change such that the developers move forward.
- What would be the impact on residential gas users from natural gas supply constraints caused by a surge in demand for gas because of newly constructed power plants? I understand that the Department of Community, Trade and Economic Development's witness Jim Lazar will be addressing this point in great detail in his testimony (JL-T). NWEC represents low income and consumer interests in utility proceedings throughout the region. Significant gas price increases for residential gas consumers

would be a serious unintended consequence of a set of projects simultaneously coming on line, potentially resulting in life-threatening circumstances for low and moderate income families during the winter heating season.

- Is there enough generation capacity already sited in the state to meet the potential supply deficit as described by Applicant witness Jim Litchfield in his testimony (JL-T)? Washington state makes up only half the load in the region. If all the permitted projects are developed, Washington state has no power shortfall. The Northwest Power Planning Council's Reliability Study of 2000 shows that a variety of mechanisms are needed to address the supply deficit. Building new central station power plants is one of many potential solutions. The uncertainty surrounding actual construction of sited projects makes it difficult to assess whether this project is needed to address the deficit. The reliability concerns raised in the Power Council's study are not year-round concerns; in fact, they are isolated to a few days, in primarily winter months, if weather conditions are very cold and the previous spring has produced low water in the hydroelectric system. Targeted energy conservation measures and strategically placed distributed generation may be more effective at addressing Washington's power shortfall concerns.
- If the Sumas 2 facility is permitted, should that permit be limited so that the developer has a restricted amount of time in which to build the facility before the permit expires? To provide both environmental and resource certainty, a shorter build window should be established by EFSEC. I understand that Mr. Lazar addresses this concept in more detail in his testimony (JL-T).

C. Regarding the final question in your list, do you think the timeline for building the proposed facility may be longer than implied by the applicant?

D. In his prefiled testimony (DE-T, page 9), David Eaden states that the proposed plant will be "fully operational approximately 2.5 years after the site certificate is signed by the Governor" which would be approximately the first quarter of 2003. There is a possibility that construction of the facility would be delayed pending the applicant's continued efforts to pursue a sales and use tax break through the Washington Legislature. The applicant already has indicated an interest in revisiting the tax break during the 2001 session. That tax break adds up to almost $24 million for the applicant, and the possibility of its approval by a future Legislature may provide a great enough incentive to delay construction of the proposed facility. Such a delay, for tax or any other reason, raises questions about the applicant's goal of using this facility to meet the region's supply deficit.

III. GREENHOUSE GAS EMISSIONS

R. Will the proposed facility emit greenhouse gases?

A. Yes. The Greenhouse Gas Offset Strategic Plan (Plan), indicates that the proposed facility will emit up to 2.4 million tons/year of carbon dioxide (CO_2) at 100% capacity and load factor. In addition, the Greenhouse Gas Offset Strategic Plan (The Plan , p. 2-1) states that up to 161 tons/year of methane will be emitted.

Q. What is the applicant’s proposal for addressing greenhouse gas emissions?

A. The Plan primarily addresses mitigation and offset of CO_2 emissions. There is currently no cost-effective commercially available control technology for CO_2 emissions. The Plan describes the facility itself as a greenhouse gas mitigation project because its power may

displace dirtier resources. The Plan also proposes a voluntary investment of $100,000 per year for ten years in greenhouse gas research, offset or management.

Q. How will testimony from the NW Energy Coalition and Washington Environmental Council (WEC) address CO_2 emissions?

A. In his testimony, Philip Mote (PWM-T) lays the groundwork for understanding the environmental impact of greenhouse gas emissions on the Pacific Northwest. Peter West (PGW-T) addresses the mitigation of greenhouse gas emissions. His testimony includes regional regulatory efforts to mitigate carbon dioxide emissions; analysis of the proposed power plant's efficiency level and subsequent CO_2 emissions; and options for mitigation of impacts caused by the proposed facility. KC Golden's (KCG-T) testimony focuses on the rationale behind and implications of the City of Seattle's recent resolution to reduce greenhouse gas emissions. My testimony focuses on support for CO_2 mitigation and offset efforts and the sufficiency of the applicant's Greenhouse Gas Offset Strategic Plan.

Q. Why do NWEC and WEC particularly emphasize CO_2 mitigation and offsets in testimony submitted in this proceeding?

A. As discussed by Philip Mote (PWM-T) and Counsel for the Environment's witness Richard Gammon (RHG-T), CO_2 is the most important long-lived greenhouse gas and the relative contribution of CO_2 to global warming is estimated to be roughly equal to that of all other greenhouse gases combined. The Plan states that CO_2 released by fossil fuel combustion is the largest single source contributing to global warming, accounting for up to one-half of the total (Plan, Page 1-4). Predominant scientific and economic opinion favors immediate efforts to deal with the problem. Over 1,500 senior scientists from around the world, including 102 Nobel Prize winners, have declared in their World

Scientists' Call to Action that global warming is a real and serious threat. More than 2,000 economists have said that climate change poses significant economic, environmental and social risks.

While gas-fired combined cycle combustion turbines are the cleanest of the fossil fuel generating technologies, this virtue does not make them benign nor eliminate them as part of the problem contributing to global warming. Although CO_2 emissions are a significant contributor to climate change, they are not yet consistently regulated. Therefore, they require more discussion and analysis in this type of proceeding than emissions for which regulations and air quality criteria exist. State and local action is necessary until such time as the Federal government establishes national carbon emission control strategies.

Q. What actions have been taken internationally on climate change?

A. European and Scandinavian countries, Japan, and Canada have been world leaders in addressing global warming through regulations and direct actions. They have pledged to meet or exceed the targets outlined in the Kyoto Protocol to reduce greenhouse gas emissions to below 1990 levels. France recently announced a ten-year, 100-measure plan to address climate change that includes a carbon tax on industrial energy use. Britain has proposed emission reduction targets to reach 12.5% below its 1990 emission levels by 2010. Argentina announced emissions reductions targets in 1999. In May 2000, China promised to develop more clean energy and address climate change concerns. Closer to home, Canada has committed to meeting its Kyoto targets and is in the midst of developing its National and Provincial Plans to develop first phase measures to reduce climate changing emissions. British Columbia has launched a pilot program trading emissions credits for greenhouse gases.

Q. Although CO_2 is not presently regulated at the national level or by the State of Washington, does strong support exist for reducing, mitigating and offsetting emissions?

A. Yes, at the national, state and local levels. At the national level, in his January 2000 State of the Union address, President Clinton stated that global warming is the greatest challenge of the new century and that we must reduce greenhouse gas emissions. Washington Governor Gary Locke concurred with this assessment in several recent speeches, calling "global warming a global warning" and urging support for investments in energy efficiency and renewable energy resources to help address the problem. Individual cities and states have adopted policies and regulations related to greenhouse gas emissions. In 1997, the State of Oregon adopted in law a CO_2 standard for new fossil fuel facilities. In his testimony, Peter West (PGW-T) provides details about this standard and provides a different interpretation of the Oregon law from the applicant's interpretation as described in the Plan. The state of New Jersey has set a goal to reduce emissions to below1990 levels by 2005. In 1993, the City of Portland, OR became the first U.S. city to adopt a goal and strategy to reduce greenhouse gas emissions. On April 10, 2000, the City Council and the Mayor in Seattle, WA adopted resolution 30144, focused in part on reducing greenhouse gas emissions in the City's operations and through community actions. The Council established a long-range goal of "meeting the electric energy needs of Seattle with no net greenhouse gas emissions" and "mitigating or offsetting greenhouse gas emissions associated with any fossil fuels used to meet load growth." KC Golden provides more details about the City's actions in his testimony

(KCG-T), particularly the fact that Seattle City Light will now make CO_2 mitigation a factor when soliciting for new power generation resources.

Q. **Are businesses joining governments in taking actions to address climate change?**

A. Yes. More than 20 major corporations, including Boeing, British Petroleum, Dupont, Enron, Maytag, Shell Oil, Toyota, TransAlta, United Technologies, and Weyerhaeuser, have urged early preventative actions by the industrialized nations. They support the Kyoto Protocols as a first step and believe that businesses can and should take concrete actions to address climate change. Dupont has pledged to reduce its global carbon equivalent greenhouse gas emissions by 65%. An alliance of companies, government agencies and public interest organizations called the Climate Neutral Network has formed to bring products and services to market that have a net zero impact on the earth's climate. Almost two dozen companies and groups have joined the network, including Nike, Shaklee Corporation and The Body Shop. Canada's largest private energy producer, TransAlta, has committed to reduce greenhouse gas emissions for its entire world operations to 1990 levels by 2012 and to produce no net greenhouse gas emissions by 2024.

Q. In your opinion, is the Applicant's Greenhouse Gas Offset Strategic Plan sufficient?

A. No. First, it does not establish a performance level for the amount of greenhouse gases that should be reduced, mitigated or offset through potential projects nor is there an evaluation proposal to assess progress on an ongoing basis. Second, the criteria for investment should be expanded to include additional elements. Third, the offset, management and research projects under consideration are unduly narrow and rely primarily on carbon sequestration, which is among the most difficult mitigation or offset category to verify and confirm.

Q. Please expand on your first point.

A. According to the Plan (p. 3-5), the applicant proposes "to offset so much carbon as is possible through the voluntary investment of $100,000 per year in greenhouse gas research, offset or management projects for ten years." The applicant's commitment to carbon offsets should be judged on its ability to mitigate or offset CO_2 emissions from the proposed facility. The $100,000 investment level appears to have no ecological or market basis other than the applicant's willingness to pay. The applicant provides no commitment to actually achieving and tracking offsets. Alternatively, the applicant should set a target for emissions mitigation and offsets and then calculate the cost of achieving those reductions.

Q. Can you provide an example of an existing performance level?

R. As detailed in the direct testimony of Peter West (PGW-T), Oregon's carbon standard requires a developer of a new fossil fuel power plant to mitigate or offset CO_2 emissions in excess of 0.675 lbs/kWh through investing directly or through a third party in mitigation projects or providing funds to a qualified independent organization for implementation. If the site certificate holder decides to move forward with direct investment in carbon mitigation or offset projects, Oregon's Energy Facility Siting Council will determine the amount of CO_2 reductions that will result from the proposed projects and whether the resulting net CO_2 emissions from the facility meet the legal standard. In making its determination about the adequacy of a proposed mitigation or offset project, the Council will consider the certainty that projected offsets will be achieved; the ability of the Council to determine what reductions actually resulted from the project based on the monitoring

and evaluation proposed by the applicant; and the extent to which CO_2 reductions would have occurred in the absence of the proposed project.

Q. How can the applicants criteria for investment be improved?

A. The Climate Neutral Network published design principles in May 1999. I would add three additional criteria to those listed by the applicant in the Plan (Page 3-6).

1) Design or select offset projects that create permanent emissions reductions or offsets. The Plan's last criterion focuses on the long-term potential for the investment to contribute to future GHG offsets. I interpret this to refer to research in energy technologies, not actual persistent and resilient emissions offsets.

2) Invest in projects that can be replicated and therefore benefit others seeking such offsets.

3) Projects must be in the public domain and verifiable such that measuring, monitoring and evaluating emissions reductions can be accomplished.

Q. Why is the applicant's emphasis on investment in carbon sequestration efforts and sequestration research inappropriate?

A. First, there is considerable uncertainty about the long-term effectiveness of using sequestration to offset fossil fuel emissions. Fossil fuel carbon has been sequestered in the earth for millions of years and would most likely remain there for many millions of years in the future without human intervention. For carbon offset projects to produce an equivalent effect over time to avoided fossil carbon emissions, the sequestered carbon would need to be permanently stored. The question of permanent storage is an important one because biological systems by their nature are vulnerable and unstable. Forests are subject to unexpected carbon losses due to extreme weather, pests, fire, climate change,

political instability, and cancellation of contracts that lead to logging. Second, it is not easy to precisely quantify and verify the amount of carbon sequestered by forests. Offsets depend on the species of trees planted and their individual rates of carbon uptake. Methodological questions exist, including what is measured and over what time period, as do measurement uncertainties. Third, it is difficult to verify that investment in a carbon sequestration project is an incremental addition to the sequestration that would have otherwise occurred absent that specific investment. Fourth, sequestration efforts may encourage creation of environmentally unsound industrial tree plantations. Fifth, carbon sequestration projects do not contribute to the technological innovation in the energy sector that is necessary to reduce fossil fuel emissions in the long term. Finally, given the advent of climate change, it remains to be seen whether the capacity of terrestrial ecosystems to act as a sink for atmospheric carbon dioxide will increase, decrease, or remain the same in the future.

Q. What other types of projects should be considered?

A. Emissions reduction programs that include energy supply improvements (including distributed power technologies and renewable energy resources) and investments in energy efficiency programs. Investment in energy efficiency, energy conservation and renewable energy projects reduces the need for energy generated by fossil fuels, thus displacing emissions that otherwise would have occurred. Most conservation and non-hydro renewable energy projects produce negligible to no air emissions and have limited water and wildlife impacts. Prevention of emissions is clearly superior from an environmental and health standpoint.

Q. What is your recommendation for a CO_2 mitigation and offset plan for the applicant?

A. First, the applicant should commit to full mitigation and offset of CO_2 emissions from the proposed facility, including ongoing monitoring and evaluation to ensure that projected results are achieved. The combined testimonies of Philip Mote (PWM-T) and Richard Gammon (RHG-T) show the pressing need for reduction of greenhouse gases, and Peter West's testimony (PGW-T) demonstrates that it is economically feasible to reduce, mitigate and offset CO_2 emissions. Full mitigation and offset is critical from an environmental perspective and can provide economic opportunities for the applicant as markets for low impact and mitigated generation resources expand. Seattle City Light will clearly be purchasing power from mitigated sources over unmitigated sources and the California and Oregon retail markets do and will value low impact environmentally preferable resources.

Second, the applicant should create a portfolio of projects with the goal of full mitigation and offset of CO_2 emissions. The portfolio should include measures that are verifiable, long-term, sustainable and consistent with generally accepted mitigation and offset practices. At least two-thirds of the investments should be domestically, preferably regionally invested. Many collateral benefits (e.g. economic, environmental and health) may exist for the community and the applicant as a result of domestic and regional investments. The portfolio should limit the applicant's investment in sequestration to 10-20% and maximize long-term solutions such as investment in energy conservation and non-hydro renewable energy resources (e.g. wind, solar, geothermal).

Q. Has the applicant indicated a willingness to examine investment in energy conservation and renewables as a way to offset CO_2 emissions?

A. Although the Plan does not address investment in conservation and renewables, the applicant in direct testimony (DJ-6) mentions that funds for greenhouse gas mitigation projects could be used for investment in alternative energy projects.

Q. The applicant's direct testimony (EH-T, p. 17) states that the applicant has offered to work with the Energy Division of the State Department of Community, Trade and Economic Development (CTED) to identify appropriate mitigation projects. What is your response?

A. The applicant should commit to working with a broad set of stakeholders, including CTED, to identify appropriate, effective mitigation and offset projects. Also, NWEC supports a mitigation approach that enlists an appropriate third party (not NWEC) with expertise in this area to manage and implement a mitigation and offset portfolio for the Company.

IV. USE OF BACKUP FUEL OIL

Q. What is the applicant proposing as a source of backup fuel for the proposed facility?

A. The applicant proposes using 9,249,840 gallons of No. 2 diesel oil to generate power up to 15 days per year, or as necessary, in the event of natural gas curtailment (DEIS, pp. 2-23, 3.9-4). Sumas Energy 2 plans to store 2,500,000 gallons of oil on site (DJ-T, p. 11).

Q. What are the environmental impacts associated with the proposed backup diesel fuel generation?

A. A host of environmental impacts are associated with the transportation, storage and use of the oil. According to Volume I of the Application for Site Certification Agreement (p.

2.9-4), all of the diesel fuel required by the proposed facility will be delivered in trucks. The initial filling of the tank would require 250 truck trips (p. 5.2-23). During facility operation, to maintain fuel reserves at peak load, four trucks per hour for up to two 12-hour days would be required to replenish the fuel supply (pp. 5.2-24, 25). Oil contains substantially more carbon per energy unit than natural gas and emits other air pollutants in greater quantities than natural gas. In addition, the supply trucks themselves emit CO_2, NO_x, particulates and volatile organic compounds (VOCs).

According to the Plan (p. 2-1), oil-fired generation will emit about 284 tons/hour of CO_2 while each of the two Westinghouse turbines operating at base load emit approximately 107 tons/hour of CO_2. The DEIS (p. 3.1-10, Table 3.1-3) shows that the facility operating at base load fired by oil will emit more than three times as much NO_x as the facility operating at base load supplemented by duct firing (12parts per million vs. 3 parts per million), the proposed scenario for 350 days of the year. We acknowledge and appreciate the applicant's commitment to reduce NO_x emissions through adjustments in the selective catalytic reduction system for the turbines (Letter from Perkins Coie to All Parties, May 31, 2000). The DEIS (p. 3.1-10, Table 3.1-3) shows that VOCs also are higher with diesel fuel generation than natural gas generation. In the presence of VOCs and sunlight, NO_x is a precurser to ozone. Particulate and NO_x emissions from the truck traffic could also add to the health and environmental concerns already facing the communities of Abbotsford and Sumas depending on the location of the oil refinery.

It is important to note that the DEIS (p. 2-23) states the diesel oil may be used by the applicant “as necessary,” creating great uncertainty about environmental impacts. EFSEC should specifically clarify in the permit the limitations regarding annual use of back-up oil.

Q. Should the applicant be required to explore alternatives to diesel fuel?

A. Yes. The applicant should consider alternative forms of backup fuel that would be environmentally preferable to diesel fuel and provide needed reliability.

Q. Please provide an example of an option the applicant could explore as an alternative to diesel fuel.

A. The applicant could examine the cost, feasibility and environmental impacts of using liquid natural gas as the fuel supply backup instead of diesel fuel. Mr. Lazar (JL-T) addresses this idea in further detail in his testimony.

V. TRANSMISSION CONSTRAINTS

Q. How will the applicant transmit the power from the proposed facility?

A. The electricity will travel over a new 5.9 mile line into Canada to the BC Hydro Clayburn substation. A half mile of this new line will be in the United States. The applicant has asked the Bonneville Power Administration (Bonneville) about firm capacity levels on the Northern Intertie which would bring the power back into the U.S.

Q. Has Bonneville responded to this request? If so, what did it conclude?

A. Yes, Bonneville completed the System Impact Study on June 1, 2000 (Exhibit NEH-1). The study results found that "there may not be sufficient long term firm available transfer capability to accommodate SE2's transmission request for 660 MW from Custer Substation to John Day and Big Eddy substations after January 2003." The study also finds that it is uncertain as to whether there is capacity on the Intertie in 2002 due to previously planned construction outages. The study goes on to state that system upgrades and reinforcements that would be necessary to accommodate the applicant's transmission request are being further studied.

Q. Will the proposed facility have transmission impacts?

A. Given the results of the Bonneville study I would say yes. With the limits on the Northern Intertie, I would expect the applicant to seek other transmission alternatives to building the line to the Clayburn substation in BC. Even with the clarity brought by the Bonneville study, this is a very complex issue with lots of unknown variables. More analysis is needed to evaluate the full system impacts beyond the question of capacity on the Northern Intertie. This project could lead to the need for upgrades to existing facilities or construction of new facilities in the Northwest, both of which would have environmental and economic impacts. The DEIS (p.1.1-9) states that if the power is consumed in the U.S., transmission upgrades might be required.

Q. What type of constraints might the Northwest grid face?

A. The Northwest grid is already transmission constrained. In materials prepared for the Bonneville transmission rate case, Bonneville projected a need to spend over $100 million on upgrades for the transmission system and in particular the South to North capability of the Northern Intertie. In the spring and summer, the surplus hydropower in the Northwest and BC already puts constraints on the system.

The Applicant states in direct testimony (DJ-T, p. 10) that the facility will be a merchant plant selling into the open power market. If this power is headed for California markets then already limited availability on the Southern Intertie at various times of the year could be further reduced.

In addition, operational changes brought on by wholesale power restructuring and the increased buying and selling of power among utilities, independent power producers and Bonneville has pushed traffic on the transmission system to an unprecedented level. The

applicant states that changes in the electric industry and the establishment of a Regional Transmission Organization (RTO) will reduce transmission costs, improve cost-effectiveness and ease congestion (DJ-T, p. 9). The hope and vision for RTO's is that they will provide much needed efficiency and consistency to the transmission system. This remains to be seen. Previous attempts to coordinate transmission service in the region proposed significant leveling of costs across the region with large increases for some transmission users. Stakeholders in the Northwest are in the midst of negotiating the structure, terms and conditions for an RTO; it is far too early for the applicant to claim lower transmission fees. As a result, transmission constraints may in fact be a problem and this facility may contribute to exacerbation of these constraints. EFSEC should not rely on the presumption that the RTO will handle all these problems and that this facility will have no impact on the regional transmission picture.

Q. What should EFSEC do given these concerns?

A. More analysis is needed on the overall impacts of this proposed facility on the regional transmission system. EFSEC should work with Bonneville and the applicant to establish a more complete picture of the transmission constraints that might result from this facility prior to granting a permit.

Q. Does this conclude your testimony?

A. Yes.

END OF TESTIMONY

I declare under penalty of perjury that the above testimony is true and correct to the best of my knowledge.

Dated: June 23, 2000

Signed:

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Nancy Hirsh